

SC Farm Bureau
Ag in the Classroom
Post Office Box 754
Columbia, SC 29202

803.936.4237
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@SCagintheclass

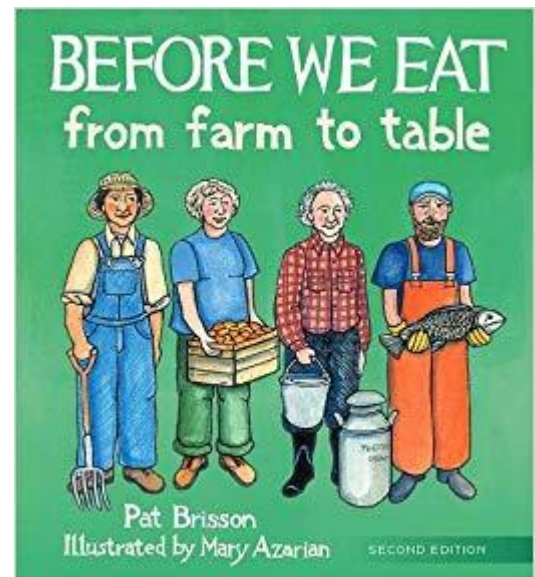
March 2020

Before We Eat

By: Pat Brisson

“Milk doesn’t just appear in your refrigerator, nor do apples grow in the bowl on the kitchen counter.”

Before we eat, many people must work very hard—planting grain, catching fish, tending animals, and filling crates. In this book, vibrantly illustrated by Caldecott Medalist Mary Azarian, readers find out what must happen before food can get to our table to nourish our bodies and spirits.¹



Did You Know? (Ag Facts) ²

- Agribusiness is South Carolina’s largest economic sector, contributing nearly \$42 billion and over 200,000 jobs to the state’s economy.
- There are nearly 25,000 farms in South Carolina covering nearly 5 million acres of farmland.
- One U.S. farm feeds 165 people annually in the U.S. and abroad.
- Products we use in our everyday lives come from plant and animal byproducts produced by America's farmers and ranchers.

Discussion Questions

- Where does our food come from?
- What would a day in the life of a farmer be like?

Grade Level(s): PK - 3

Purpose: Students will explore the sources of a variety of agricultural products and discover that farms can be diverse in size and in products that are grown and raised.

Vocabulary:

- **agriculture:** the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products

Background Agricultural Connections: ³

Agriculture is an important part of our lives, from what we wear to what we use in our classrooms and what we do after school. We may not always think of agricultural products as the physical source of the items or things we use everyday. However, most of these daily essentials can be tracked back to an agricultural source.

Production agriculture, or farming, is what most people think of when they hear the word agriculture. This is the actual production or growing of raw commodities. People typically categorized as farmers and ranchers are people who raise and harvest crops and livestock for consumption or purchase. It doesn't stop there. Production agriculture also includes a wide variety of specialties such as raising fish, timber, fur-bearing animals, herbs, and much more.

Many of the products we use every day come from agriculture. The sheets we sleep on and the pajamas we wear are made from cotton, just like cotton swabs for your ears. The feathers in pillows may come from chickens or ducks. The cereal and milk we eat for breakfast, the pencils, crayons, and paper we use at school, and the baseballs, bats and gloves we use after school all originate from raw agricultural products. We know that our food comes from agriculture, but we are also surrounded by and reliant upon many other inedible agricultural products that we use every day.

Food Brings Everyone to the Table

Materials:

- *Before We Eat* by Pat Brisson
- Construction/card stock paper
- Lined paper
- Various art supplies (markers, colored pencils, glue sticks)

Procedures:

1. Gather students for a read-aloud. Begin by asking students if anyone knows what 'agriculture' means. Ask students what they know about farms and farmers.
2. Explain to students that we can break the word 'agriculture' into two parts – 'agri' (land) and 'culture' (to grow) – so agriculture means 'growing the land'. Farmers can grow crops and they can raise livestock. Crops are plants (i.e. corn, wheat, apple trees) grown for

food. Livestock are animals (i.e. cows, pigs, and chickens) raised for food.

3. Before reading, ask students to look and listen throughout the book for different examples of crops and livestock.
4. Read the book, *Before We Eat*.

Helpful Hints:

- Hold the book wide open and to your side so you can read the story and share it at the same time.
- Be sure to give plenty of time for students to look at pictures before turning the page.
- Read with enthusiasm and expression, but don't read too fast.
- You may need to interrupt your reading to make sure the students understand what was just read. (i.e. after reading "fed the sows" ... ask "what animals do you see here?" explain that sows are female pigs)
- Stopping too often will break of the flow of the story. IF it doesn't need answered to understand the story, you can come back and discuss it after finishing the story or activity.
- You may want to use small sticky notes on the pages of the book where you have specific talking points or would like to ask the students questions.
- Keep in mind, IF you ask young students for questions...
 - Be prepared...students may ask ANY question;
 - They often don't have a question, but rather a story to share;
 - Be honest with them...if you don't know the answer, tell them you don't know.

5. Now that students understand how important farmers and ranchers are, ask them to create and decorate thank-you cards that portray farmers, agriculture, or food production.
6. Allow the students to write a thank-you letter in their card and address it to local farmers/agriculturists in the community.
7. Instruct students on how to properly format a thank-you letter with correct spelling, punctuation, and grammar.
8. Ask students to include the following components:
 - a. Greeting (*Dear...*)
 - b. Express thanks (*Thank you for...*)
 - c. Add specific details (*My family really enjoys eating fresh fruit...*)
 - d. Restate your thanks (*Again, thank you for...*)
 - e. End with your regards (*Sincerely...*)

Plan Your Own Farm ⁴

Materials:

- *Many Types of Farms PowerPoint*
- *Plan Your Own Farm* activity sheet

Procedures:

1. Use the *Many Types of Farms PowerPoint* to discuss the different types of farms that produce food.
2. Lead a discussion about farming. Include the following points in the discussion:

- A farm can grow any kind of grain, vegetable, or fruit as long as the soil and climate are right for that crop.
 - Most meat and animal products found in grocery stores come from farms. Some of our clothes are made from plants or animals grown or raised on farms (cotton, wool, leather).
 - Many types of animals, even insects such as bees, can be raised on a farm.
 - Farms can include a mix of animals and crops. They can also grow or raise just one kind of crop or animal.
 - Farms come in all sizes and can be owned by a family, multiple families, or a large company.
3. Provide each student with a *Plan Your Own Farm* activity sheet. Have them create a farm that could operate in the area in which they live. Ask them to consider their climate and soil when planning which crops can be grown and animals can be raised in their region.
 4. Provide time for the students to share the farms they created with the class.

Extension Activities:

- Have students draw a picture to enter the SC Ag in the Classroom Ag Day 2020 Coloring Contest! Find more details on scfb.org.
- Download the Farm To Cart game from American Farm Bureau. Divide the class into two groups to play the game.
- Have the students make mosaic pictures about agriculture using seeds (wheat, corn, soybeans, etc.). These seeds can be obtained from a farmer, local grain elevator or some hobby and craft supply stores. Help the students identify each seed before starting the art project. Ask students to draw a simple agricultural scene on poster board. Spread glue in just one section of the picture and add seeds. Continue to spread glue in sections one at a time, and add seeds until the picture is complete. Let the picture dry thoroughly before moving it. Allow time for the students to share their mosaics with the class and explain how their picture represents agriculture.
- Using a wall map of the United States, ask students to think about agricultural products grown or raised in certain parts of the country (examples: Florida and California-oranges, Gulf of Mexico-seafood). Ask the students to consider why the products are produced in these locations? Have groups draw the products or cut pictures out from magazines to attach to the classroom map.
- Adopt an Agriculturalist. Many teachers find it educational to have someone involved in production agriculture "adopt" their class. The students correspond regularly with the farmer or rancher's family to practice writing skills and learn about the day-to-day operation of the farm or ranch. The family may send photographs or videos, grain or feed samples, and other items from the farm or ranch. In turn, the students can write to the family to ask questions or react to what they have learned. Before students are involved, the teacher and family should set goals for the program. Establish a regular correspondence schedule to keep students interested. Invite the farm family to visit the classroom or schedule a field trip to the farm.

Suggested Companion Resources:

- Farm Pop-Ups (Activity)
- From Farm to You Coloring Sheet (Activity)
- A Day in the Life of a Farmer (Book)

- [Eating the Alphabet](#) (Book)
- [Farming](#) (Book)
- [Farms Feed the World](#) (Book)
- [From Start to Finish Series](#) (Book)
- [How Did That Get in My Lunchbox?](#) (Book)
- [Illustrated Alphabet of Farms](#) (Book)
- [Milk Comes From a Cow?](#) (Book)
- [On the Farm, at the Market](#) (Book)
- [Where Does Food Come From?](#) (Book)
- [Who Grew My Soup?](#) (Book)
- [About Farm Animals Mini Kit](#) (Kit)
- [About...Books](#) (Kit)
- [My Farm Web](#) (Kit)
- [What Is Agriculture?](#) (Poster, Map, Infographic)
- [Learning by Leaps: Agriculture and You](#) (Multimedia)
- [Food and Farm Facts Junior Booklet](#) (Booklets & Readers)

Sources/Credits:

1. Brisson, Pat. *Before We Eat*. Tilbury House, 2014.
2. South Carolina Farm Bureau Federation
3. Utah Agriculture in the Classroom
4. New York Agriculture in the Classroom

Suggested SC Standards Met:

English/Language Arts:

- K.RI.5.1 With guidance and support, ask and answer who, what, when, where, why, and how questions about a text; refer to key details to make inferences and draw conclusions in texts heard or read.
- K.RI.5.2 With guidance and support, ask and answer questions to make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.
- K.RI.6.1 With guidance and support, retell the central idea and identify key details to summarize a text heard, read, or viewed.
- 1.RI.5.1 Ask and answer who, what, when, where, why, and how questions to demonstrate understanding of a text; use key details to make inferences and draw conclusions in texts heard or read.
- 1.RI.5.2 Make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.
- 1.RI.6.1 Retell the central idea and key details to summarize a text heard, read, or viewed.
- 2.RI.5.1 Ask and answer literal and inferential questions to demonstrate understanding of a text; use specific details to make inferences and draw conclusions in texts heard or read.
- 2.RI.5.2 Make predictions before and during reading; confirm or modify thinking.
- 2.RI.6.1 Retell the central idea and key details from multi-paragraph texts; summarize the text by stating the topic of each paragraph heard, read, or viewed.

- 3.RI.5.1 Ask and answer literal and inferential questions to determine meaning; refer explicitly to the text to support inferences and conclusions.
- 3.RI.6.1 Summarize multi-paragraph texts using key details to support the central idea.

Science:

- K.L.2 The student will demonstrate an understanding of organisms found in the environment and how these organisms depend on the environment to meet those needs.
- 1.L.5B Plants have basic needs that provide energy in order to grow and be healthy. Each plant has a specific environment where it can thrive. There are distinct environments in the world that support different types of plants. These environments can change slowly or quickly. Plants respond to these changes in different ways.
- 2.L.5B Animals (including humans) require air, water, food, and shelter to survive in environments where these needs can be met. There are distinct environments in the world that support different types of animals. Environments can change slowly or quickly. Animals respond to these changes in different ways.
- 3.L.5A The characteristics of an environment (including physical characteristics, temperature, availability of resources, or the kinds and numbers of organisms present) influence the diversity of organisms that live there. Organisms can survive only in environments where their basic needs are met. All organisms need energy to live and grow. This energy is obtained from food. The role an organism serves in an ecosystem can be described by the way in which it gets its energy.

A special THANK YOU to our
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MANY TYPES OF FARMS

Dairy Farms

- Dairy farms raise animals like cows, goats, and sometimes sheep for their milk and dairy products.
- Milk can be turned into butter, yogurt, cheese, and ice cream.
- Cows are the major dairy producer because they can produce a lot of milk.



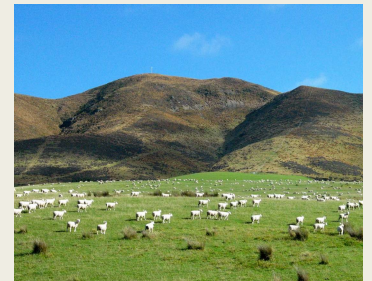
Livestock Farms

- Livestock farms usually raise animals like cattle, pigs, sheep, goats, chickens, and turkeys.
- The farmers care for the animals.
- The animals produce meat, eggs, fiber, and dairy products.



Ranches

- Ranching is the practice of raising grazing livestock, such as cattle or sheep, for meat or wool.
- Less common livestock, such as elk, bison, ostriches, or emus, are also raised on ranches.
- Ranches that accept paying guests are known as dude ranches.



Poultry Farms

- Poultry is a class of domesticated birds raised for food, eggs, or feathers.
- Chickens, turkeys, ducks, and geese are the most common birds raised on poultry farms.



Fish Farms

- Fish farms either use nets and cages to hold fish in one area or raise the fish in large tanks or ponds.
- Fish farms sell the adult fish to grocery stores or processing companies, allow people to fish in the farm space, or raise the fish and release them into the wild to help increase fish populations.
- Common farm raised fish include salmon, catfish, tilapia, trout, and cod.



Beekeeping (Apiculture)

- Beekeepers set up stacked boxes with removable sliding sheets in which honey bees build their hives.
- Honey bees produce wax to build combs on the sliding sheets. The bees bring pollen and nectar back to the hive and use it to make honey.
- Each hive has one queen, female worker bees, and male drone bees.



Grain Farms

- Grains, plants like wheat, rye, oats, and barley, are annual plants. One planting yields one harvest.
- Once the cereal plants have grown their seeds, they die and become brown and dry.
- Cereal crops are machine-harvested, typically using a combine harvester which cuts, threshes, and separates the grain from the husk.



Vegetable Farms

- Most commercial vegetable farms grow large quantities of a few types of vegetables and sell them in bulk to major markets or middlemen.
- Fresh vegetables are also sold through farm stands and farmer's markets.
- Large cities often have a central produce market which handles vegetables and manages distribution to stores and restaurants.



Orchards

- An orchard contains trees or shrubs maintained for food production.
- Fruit and nut producing trees are grown in orchards.
- Orchards are generally laid out in a grid with mown grass or bare soil between the rows for easy maintenance and fruit gathering.



Vineyards

- Grapes for making wine, raisins, or table grapes are grown on vineyards.
- Vineyards are often planted on hillsides to maximize the amount of sunlight the plants receive.
- Grapes are typically grown in dry climates.



Cranberry Bogs

- Cranberries are a group of evergreen dwarf shrubs or trailing vines that are grown in bogs.
- The fruit is a berry that is white at first and then turns a deep red when it is fully ripe.
- Cranberry beds are constructed in areas with a shallow water table. 4"-8" of sand is added to the base of the beds.



Name _____

Plan your own farm!

Below is a bird's eye view of your farm. You have fields, pastures, a barn, a pond, a bog, and some open areas to build more animal shelters or plant more crops.

Look at the list of animals and crops and think about where they can be grown or raised on a farm. Color the area where you want to put a plant or animal according to the list. Most of the colors can go in more than one area, and most of the areas can have more than one color in them. Think carefully before you color!

Corn (Yellow)
Pumpkins (Orange)
Cranberries (Red)
Fish (Light Blue)
Dairy Cows (Black)

Chickens (Pink)
Wheat (Brown)
Honey Bees (Purple)
Horses (Green)
Tomatoes (Dark Blue)

